

Patent Claims

1. Method for producing a layer compound (6) with at least two security features disposed in register to each other, comprising the following steps:
 - providing a first carrier foil (100) with at least one first security feature and first register marks,
 - providing a second carrier foil (200) with at least one second security feature and second register marks,
 - joining the first carrier foil to the second carrier foil, at least one of the two carrier foils being under tensile stress and the second or, optionally, the first carrier foil being controlled in longitudinal direction and transverse direction with the help of the first and second register marks in such a way, that a layer compound is the result, in which the first and second security features are regularly disposed to each other.
2. Method according to claim 1, **characterized in that** the controlling of the second carrier foil (200) or, optionally, the first carrier foil (100) is effected by stretching the carrier foil in longitudinal direction of the carrier foil.
3. Method according to claim 2, **characterized in that** the second carrier foil (200) is shorter than the first carrier foil (100) and is stretched relative to the first carrier foil (100).
4. Method according to claim 2, **characterized in that** the first carrier foil (100) due to the tensile stress undergoes a constant stretching in longitudinal direction of the carrier foil and the second carrier foil (200) is stretched relative to the stretching of the first carrier foil (100).
5. Method according to one of the claims 1 to 4, **characterized in that** the carrier foils (100, 200) are provided on rollers (3, 4) and are drawn off the rollers, the stretching of the first and/ or second carrier foil (100 or 200) in longitudinal direction of the carrier foil being achieved by a controlled slow down of this roller when drawing off the carrier foil from the respective roller.

6. Method according to one of the claims 1 to 5, **characterized in that** an exactly registered joining of the two carrier foils (100, 200) with respect to their longitudinal edges is achieved by means of a tension group (11).
7. Method according to claim 6, **characterized in that** the tension group is controlled with the help of the first and second register marks.
8. Method according to one of the claims 1 to 7, **characterized in that** the register marks are read by means of light guides or CCD-cameras.
9. Method according to one of the claims 1 to 8, **characterized in that** the security features are used as register marks.
10. Method according to one of the claims 1 to 9, **characterized in that** the layer compound is divided into so-called endless threads or endless strips.
11. Method for producing a security element comprising the procedure steps according to one of the claims 1 to 8, **characterized in that** from the layer compound (6) a security element with its final transverse and longitudinal dimensions is divided out.
12. Layer compound (6) comprising two carrier foils (100, 200) each having at least one security feature covering the respective carrier foil only partially, **characterized in that** the two carrier foils are joined to each other in such a way, that the security features are disposed in register to each other.
13. Layer compound according to claim 12, **characterized in that** the two carrier foils (100, 200) each have register marks, which differ from the security features of the carrier foils.
14. Multilayer security element comprising a layer compound according to claim 12.
15. Multilayer security element according to claim 14, in the form of a thread, strip, label or tag.

16. Object to which a security element according to claim 14 or 15 is firmly joined by adhesive bonding, embedding, attaching or in another fashion.
17. Document of value, in particular bank note, with an applied or embedded strip- or thread-shaped security element according to claim 15.